

Date: Tue, 15 Jun 93 04:30:02 PDT  
From: Packet-Radio Mailing List and Newsgroup <packet-radio@ucsd.edu>  
Errors-To: Packet-Radio-Errors@UCSD.Edu  
Reply-To: Packet-Radio@UCSD.Edu  
Precedence: Bulk  
Subject: Packet-Radio Digest V93 #169  
To: packet-radio

Packet-Radio Digest                      Tue, 15 Jun 93                      Volume 93 : Issue 169

Today's Topics:

    \*\* FLEA at MIT \*\* Sunday 20 June    Cambridge MA  
        ampr.org (2 msgs)  
        Baycom Software Needed  
        Cheap TNCs  
        Icom 22S modifications ??  
        macintosh  
        MFJ TNC's For Sale  
        New radio for packet  
        Soundblaster as modem?  
        TCP/IP Help, please  
        using a Sound Blaster board as a TNC  
        Western N.C. Packet Info Needed

Send Replies or notes for publication to: <Packet-Radio@UCSD.Edu>  
Send subscription requests to: <Packet-Radio-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Packet-Radio Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/packet-radio".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: 15 Jun 1993 01:53:52 GMT  
From: w1gsl@athena.mit.edu  
Subject: \*\* FLEA at MIT \*\* Sunday 20 June    Cambridge MA  
To: packet-radio@ucsd.edu

\*\*\*\*\* \$1 buyers discount with hardcopy of this notice \*\*\*\*\*

COMPUTERS - ELECTRONICS - HAM RADIO - COMPUTERS - ELECTRONICS

        FLEA all SUMMER at MIT  
        June 20th, 1993

9AM-2PM

Come to the city for a great flea - plenty of free parking.

MIT's electronics and ham radio flea will take place on the third Sunday of each month this summer, April thru October.

There is tailgate space for over 400 sellers and free, off-street parking for >1000 cars!

Buyers admission is \$2 (you get \$1 off if you're lucky enough to have a copy of our ad) and sellers spaces are \$10.00-each at the gate.

The flea will be held at the corner of Albany and Main streets in Cambridge; right in the Kendall Square area from 9AM to 2PM, with sellers set-up time starting at 7AM.

!! RAIN or SHINE !! Have no fear of rain, a covered tailgate area is available for all sellers (6'8" clearance).

Talk-in: 146.52 and W1XM/R-449.725/444.725 (PL 114.8/2A).

Sponsors: MIT Electronics Research Society  
MIT UHF Repeater Association (W1XM)  
MIT Radio Society (W1MX)  
Harvard Wireless Club (W1AF)

For more info / advanced reservations 617 253 3776

\*\*\*\*\* \$1 buyers discount with hard copy of this notice \*\*\*\*\*

\*\*\*\*\*  
Steve Finberg                      W1GSL                      w1gsl@athena.mit.edu  
PO Box 82 MIT Br              Cambridge MA   02139                      617 258 3754  
\*\*\*\*\*

-----  
Date: 14 Jun 1993 13:05:55 GMT  
From: usc!howland.reston.ans.net!darwin.sura.net!haven.umd.edu!ni.umd.edu!  
sayshell.umd.edu!louie@network.UCSD.EDU  
Subject: ampr.org  
To: packet-radio@ucsd.edu

In article <C8Ky8w.GDG@dptspd.sat.datapoint.com> jks@daneel.uthscsa.edu writes:  
>In <1vej1\$1b9a@ilx018.intel.com> dbraun@ilx049.intel.com (Doug Braun) writes:  
>  
>> What is "ampr.org" an abbreviation for?  
> amateur packet radio (organization)  
>  
>> If all Ham radio internet addresses belong to this domain (?), why is it  
>> necessary?  
>  
>Because the ampr.org (44. ) network is made up of many subnets, including  
>countries, states/provinces, and metropolitan regions. Any routing system  
>needs to know where something is to get a data packet to its destination.  
>Since ampr.org is part of the larger internet, the addressing scheme  
>identifies not only the locale (in the case of our net) but also the fact  
>that the station/node is amateur radio based.... (there are other .org  
>addresses).

Sorry, this is just wrong and worse, misleading. You confuse two different concepts that will just make it more difficult to understand what's going on. AMPR.ORG has nothing to do with the class-A network 44.0.0.0. It just so happens that the vast majority of address records in the AMPR.ORG happen to be on the 44.0.0.0 network, but certainly not all of them. Conversely, there is nothing preventing me from putting my NeXT at home, wa3ymh.umd.edu, on network 44.0.0.0 either.

Think NAMES, ADDRESSES, and ROUTES. These are separate and distinct concepts.

Names (foo.AMPR.ORG) allow you to attach a friendly label to things. They don't necessarily tell you anything about where that thing is or how to get to it. (Domain) Names are assigned and structured along a purely administrative hierarchy that doesn't have to reflect network topology.

Addresses effectively tell you "where" on the network a thing is. The address is assigned consistent with how subnets are designed, and you must have a proper address that corresponds to the place on the network topology that you plug in to make it "work". Addresses are these 44.0.0.0 things.

Routes tell you how to get to an address from where you are now. They are either maintained manually or automatically by using routing protocols.

> > Will the Internet-with-a-big-I understand these forms of addresses?  
>  
>Absolutely!

Nope. I suspect that the Internet as a whole is somewhat ignorant of how the 44.0.0.0 address are assigned and how network 44.0.0.0 routing (such as it is) can be used.

On the other hand, AMPR.ORG domain names can be happily resolved since there are AMPR.ORG name servers (at least for most of the AMPR.ORG domain) on the Internet.

Louis Mamakos  
wa3ymh  
DNS guy

-----  
Date: 14 Jun 1993 19:49:12 GMT  
From: nothing.ucsd.edu!brian@network.UCSD.EDU  
Subject: ampr.org  
To: packet-radio@ucsd.edu

louie@sayshell.umd.edu (Louis A. Mamakos) writes:  
>Nope. I suspect that the Internet as a whole is somewhat ignorant of  
>how the 44.0.0.0 address are assigned and how network 44.0.0.0 routing  
>(such as it is) can be used.

As a whole, the Internet is as unaware of the internal structure of network 44 as it is of any other attached network. That's how it should be. That our network 44 is a bit more bizarre than most internally is unimportant.

What the Internet-as-a-whole DOES know is that it can reach network 44 by routing packets to one of our campus gateways, which is a Cisco router that forwards the network-44-destined packets to a PC that lives under my desk.

That pc is responsible for taking the network 44 packet, examining a routing table that I don't update often enough, and if a further route is known, encapsulating the IP packet for transport to that further router.

Those further routers may forward, swallow, or discard the packet. If the packets pass certain security barriers, they may even be sent somewhere via radio.

And that's how it works.  
- Brian

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Date: 13 Jun 93 19:23:09 GMT  
From: sdd.hp.com!ux1.cso.uiuc.edu!howland.reston.ans.net!noc.near.net!ceylon!genesis!toshiki!jbm@network.UCSD.EDU  
Subject: Baycom Software Needed  
To: packet-radio@ucsd.edu

Please Help me, I have Baycom 1.5 but unfortunately It is in a foreign language! I have also heard a another baycom compadible program that has mouse support, graphical interface, and yapp functions..If anybody has this software please send it to me UUENcoded at jbm@toshiki.broadalbin.ny.us

JB Murdico  
N2SQS  
n2sqs@wa2umx.#eny.ny.us

-----  
Date: 14 Jun 1993 13:15:48 GMT  
From: olivea!inews!ilx018.intel.com!ilx049!dbraun@uunet.uu.net  
Subject: Cheap TNCs  
To: packet-radio@ucsd.edu

Can anyone give me any recommendations on cheaper (<\$200) TNC's?  
I don't need anything especially fancy. Since I am here in Israel,  
I have to get a friend back in the USA to buy it for me and send it,  
so I can't do any tire-kicking to help me decide.

P.S., The ability to work with a reasonable number of satellite modes  
would be a plus.

--  
Doug Braun (N10WU)

-----  
Email: dbraun@iil.intel.com  
Intel Mail: IDC1-41  
iNet: 8-435-5069 Long Distance: 011-972-4-355069  
Fax: 8-435-5999 Long Distance: 011-972-4-355999  
Snail Mail: US: Other:  
PO Box 311 Intel Israel, Ltd.  
Mendham, NJ 07945 IDC1-41  
Matam Scientific Center  
Haifa, Israel 31015  
-----

"There is no human problem which could not be solved if

people would simply do as I advise." -- Gore Vidal

-----  
Date: Tue, 15 Jun 1993 02:56:33 GMT  
From: concert!gatech!howland.reston.ans.net!ux1.cso.uiuc.edu!moe.ksu.ksu.edu!  
osuunx.ucc.okstate.edu!unx.ucc.okstate.edu!marcuss@decwrl.dec.com  
Subject: Icom 22S modifications ??  
To: packet-radio@ucsd.edu

Does anyone know how to modify an ICOM 22S diode programmable radio such that it will receive frequencies other than those in multiples of 0.050 MHz. (I want to work packet on 145.010, and .070, but this radio in its current unmodified state will not tune to those frequencies.) I would like to work packet on .010, .050, and .070, but do not have much money!

Also, I am using an MFJ 1274. What is the fastest speed it will currently send data (baud), and what type of external add-on can I get for it to improve its speed. Will the radio work at this speed?

Thankyou very much for you help!  
Marcus Sutliff N5WRH  
marcuss@unx.ucc.okstate.edu

-----  
Date: Mon, 14 Jun 1993 12:57:07 EDT  
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!math.ohio-state.edu!sol.ctr.columbia.edu!hamblin.math.byu.edu!yvax.byu.edu!cunyvml!rohvm1!mahdwb@network.UCSD.EDU  
Subject: macintosh  
To: packet-radio@ucsd.edu

I am wondering what I would need to use a mac with packet. I have a radio....is there software that would let the microphone and headphone jacks of the mac work as the TNC?  
thanks for any info....if passible, please send replies in email since I don't have access here very much.  
thanks

-----  
Date: Mon, 14 Jun 1993 14:05:11 GMT  
From: swrinde!cs.utexas.edu!math.ohio-state.edu!darwin.sura.net!  
gatekeeper.es.dupont.com!esds01.es.dupont.com!  
GRIB%esvx17.es.dupont.com@network.UCSD.EDU  
Subject: MFJ TNC's For Sale  
To: packet-radio@ucsd.edu

Hi,

I have two MFJ TNC's for sale:

- 1) MFJ 1274 Packet TNC. Has HF tuning bar. With AC adapter \$75
- 2) MFJ 1278 multimode (Packet, RTTY, AMTOR, FAX, etc) with adapter and original box. \$150

I have manuals for each.

Please call:

(302) 834-8685 between 3:30pm and 9:00 Eastern

BTW these prices are firm, and am willing to split shipping cost and send COD.

-----  
Date: Mon, 14 Jun 1993 14:22:45 GMT  
From: ddsww1!gagme!gagme!ross@uunet.uu.net  
Subject: New radio for packet  
To: packet-radio@ucsd.edu

I got my packet station running with an Icom HT, and have quickly found that it is woefully inadequate. I was wondering if anyone had suggestions on what radio to get. I had heard that the Motorola Micor or Mitrec radios would be a good choice. I want something that can be dedicated to packet use, so I don't need all of the fancy synthesized tuning, PL and DTMF stuff. I hope to upgrade to 9600 soon, so I would most like to have a radio that could be modified for 9600.

Thanks for your help  
Ross Sponholtz  
N9TGX

-----  
Date: Fri, 11 Jun 1993 15:39:55 GMT  
From: swrinde!sdd.hp.com!col.hp.com!fc.hp.com!mckee@network.UCSD.EDU  
Subject: Soundblaster as modem?  
To: packet-radio@ucsd.edu

Warren Toomey (wkt@cserve.cs.adfa.oz.au) wrote:

: The advantage of the Soundblaster (the Pro, actually, the others don't have

: a DSP chip) is that you can use it for other things, and you don't need a TNC.  
: Anybody know what DSP chip is in the Soundblaster Pro?

The chip on the SB Pro isn't much of a DSP. But you can use the CPU of the PC the SB is in as a DSP. For my SSTV software, my 25 MHZ 386 SX can do the computations required for SSTV receive in better than real time. I would expect similar requirements for the simple packet modulation techniques. The fancy ones would require considerably more CPU.

Bret

NOMTA

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Date: Mon, 14 Jun 1993 15:14:39 GMT  
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!math.ohio-state.edu!cs.utexas.edu!swrinde!emory!rsiatl!ke4zv!gary@network.UCSD.EDU  
Subject: TCP/IP Help, please  
To: packet-radio@ucsd.edu

In article <739976492.AA00299@chowda.sbs.com>  
David.Cohen@f120.n323.z1.chowda.sbs.com (David Cohen) writes:

>Hello:

>

>Please get me some advice on a problem that I have with TCP/IP. I  
>have KA9Q NOS version 911229 (PA0GRI v1.8b) that I am using with an  
>MFJ -1278 TNC (revision 9 board) under KISS mode. I am using a  
>386/40 clone under DOS 5.0.

>

>I can do ax25 connect sessions, but nothing else seems to work  
>properly. For instance, when I try an FTP session with another host,  
>I find that my station will call out and get a response from the  
>station I am trying to connect with. Once we have each exchanged  
>a single packet, there is no further reply to my transmissions. I  
>am using the following trace command to arrive at these conclusions:

>

> trace ax0 0211 spool\trace.txt.

>

>I have read several BBS manuals on TCP/IP and have tried three versions  
>of KA9Q NOS. I have tried using a "vanilla" configuration (minimum  
>autoexec.bat and config.sys), and seem to get the same results each  
>time.

>I don't think it is the computer, and I followed the instructions to  
>set up autoexec.nos and domain.txt. I have a feeling that either it  
>is the TNC, or something wrong in my autoexec.nos file.

>

>I have been at this for weeks, and I have run out of things to try.  
>Any help would be greatly appreciated.

Are you in the domain.txt of the stations you are attempting to contact? And do they have a cluster route entry for your address subdomain? If not, you'll get a response to your ARP request, but the other station will not know how to route IP packets to you and will have what is called a "half open" connection with you that is strictly one way.

Note that ARP requests are addressed to QST and serve to map IP to AX25, but they don't automatically establish a reverse route for IP packets. That's a function of the individual routing tables in each host.

Gary

```
--  
Gary Coffman KE4ZV          | You make it,      | gatech!wa4mei!ke4zv!gary  
Destructive Testing Systems | we break it.      | uunet!rsiatl!ke4zv!gary  
534 Shannon Way           | Guaranteed!       | emory!kd4nc!ke4zv!gary  
Lawrenceville, GA 30244   |                   |
```

-----  
Date: Fri, 11 Jun 1993 15:51:28 GMT  
From: usc!sdd.hp.com!col.hp.com!fc.hp.com!mckee@network.UCSD.EDU  
Subject: using a Sound Blaster board as a TNC  
To: packet-radio@ucsd.edu

Jack Snodgrass (kf5mg@iinus1.ibm.com) wrote:  
: Does anyone know what issue of what magazine had the blurb about  
: doing SSTV using a SB board? Has anyone contacted the program's author  
: to discuss doing something similar with packet instead of SSTV. Thanks.

As I mentioned in a previous post, I have looked into it. I have had a working sound card SSTV system for more than a year, but lack of time has prevented me from putting the final touches on it and then marketing it/sharewareing it/giving it away. It currently does not talk to soundblasters, but to something else (a long story), but I have working routines to talk to a SB, and guestimate it would take me a couple of evenings to make it work on the SB. Unfortunatley it has waited almost 6 months for those evenings :-).

For packet, I think that the best place to start would be the Poor Mans Packet (PMP) software which does almost all the work of the TNC in software already but requires external hardware to detect frequency (1200 or 2400 HZ) - one bit of input only. It should be straightforward to replace the routines which talk with the hardware with routines that

look at the soundblaster data stream. I even went so far as to get the PMP sources and a Turbo C compiler to work on this project.

Someone has made the point that the soundblaster is not full duplex (cannot send and receive at the same time). While this is true, I'm not sure it is relevant, since my radio is also not full duplex either.

If there is sufficient interested from people with the time and talent to pull this off, I might be talked into finding the time to finish the SSTV software and distribute it as shareware or something.

73,

Bret "I'd like to have packet" McKee  
NOMTA

-----  
Date: Mon, 14 Jun 1993 16:59:24 GMT  
From: usc!howland.reston.ans.net!darwin.sura.net!jabba.ess.harris.com!  
mlb.semi.harris.com!controls.ccd.harris.com!bal@network.UCSD.EDU  
Subject: Western N.C. Packet Info Needed  
To: packet-radio@ucsd.edu

I will be in Western North Carolina during ARRL Field Day. The ARRL repeater directory (1992-1993) does not list any packet for N.C.. I am sure there has to be packet in Western N.C. :). Could someone provide information on any open packet digipeaters, BBS, etc.. in Western N.C. (or north northeastern Georgia)?

Thanks!

--  
Bruce Lifter  
blifter@ccd.harris.com

.....  
KD4WLF/AA  
-----

-----  
Date: Mon, 14 Jun 1993 14:42:41 GMT  
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!math.ohio-state.edu!cs.utexas.edu!swrinde!emory!rsiatl!ke4zv!gary@network.UCSD.EDU  
To: packet-radio@ucsd.edu

References <dmcreyno-110693082520@134.5.142.4>,  
<1993Jun11.150745.9462@uhura.neoucom.edu>,  
<930613.142008.5Z6.rusnews.w165w@garlic.sbs.com>

Reply-To : gary@ke4zv.UUCP (Gary Coffman)  
Subject : Re: Digital microwave project

In article <930613.142008.5Z6.rusnews.w165w@garlic.sbs.com> system@garlic.sbs.com (Tony Pelliccio) writes:

>Now here's a good question. At breakfast today my friend and I were  
>talking about possibly installing a 10GHz link between my house and his  
>(about 1.5 miles apart) and using it as a SL/IP connection.

>

>Now I know that profane/obscene material isn't permitted but all the  
>stuff is sent compressed and unreadable unless you're running uucico  
>etc. What is the legality of this? I mean, music can be transmitted, as  
>digital (midi files, etc) so what would the issue be with passing  
>alt.sex.stories in coded format? Just out of sheer curiosity of course.

Strictly speaking, all such transmissions are prohibited, even the  
midi sequences. The rules don't specify the format, only the content.  
Practically speaking, the \*intent\* of the regulations is to protect  
the public, using unsophisticated equipment, from being exposed to  
indecent materials, and to restrict broadcast type services. So a  
compressed data stream is just a data transmission that's unlikely  
to be hassled.

>And a SL/IP connection stays up all the time. Would this be  
>considered as broadcasting even if you ID'd all the time? There are alot  
>of "if's" to consider when passing data over amateur radio frequencies.

There is no legal limit to the duration of an amateur contact. As long  
as the 10 minute ID rule is observed, a control operator is present  
(unattended operation is permitted under special conditions), and the  
transmissions are intended to be point to point between amateur stations,  
there's no problem with semi-permanent connections.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

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Date: 15 Jun 93 04:20:39 GMT  
From: ogicse!emory!darwin.sura.net!news-feed-1.peachnet.edu!athena!  
aisun3.ai.uga.edu!mcovingt@network.UCSD.EDU  
To: packet-radio@ucsd.edu

References <1993Jun11.150745.9462@uhura.neoucom.edu> ,

<930613.142008.5Z6.rusnews.w165w@garlic.sbs.com>,  
<1993Jun14.144241.17691@ke4zv.uucp>  
Subject : Re: Digital microwave project

In article <1993Jun14.144241.17691@ke4zv.uucp> gary@ke4zv.UUCP (Gary Coffman)  
writes:

>In article <930613.142008.5Z6.rusnews.w165w@garlic.sbs.com> system@garlic.sbs.com  
(Tony Pelliccio) writes:

>>Now I know that profane/obscene material isn't permitted but all the  
>>stuff is sent compressed and unreadable unless you're running uucico  
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>>alt.sex.stories in coded format? Just out of sheer curiosity of course.

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>midi sequences. The rules don't specify the format, only the content.  
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>the public, using unsophisticated equipment, from being exposed to  
>indecent materials, and to restrict broadcast type services. So a  
>compressed data stream is just a data transmission that's unlikely  
>to be hassled.

Actually, the FCC's intentions are clear, and are not quite what you  
said. Transmission of descriptions of music is OK so long as the music  
cannot be directly demodulated as such with ordinary radio equipment  
-- that is, you can transmit all the MIDI sequences you want, but don't  
transmit music as audio on FM, AM, or SSB.

Transmission of obscene or indecent material is prohibited regardless  
of the method of encoding. This, at least, seems to follow from various  
FCC rulings that "not only obscene words, but also \_their meanings\_  
[however expressed], are prohibited."

--

:- Michael A. Covington, Associate Research Scientist : \*\*\*\*\*  
:- Artificial Intelligence Programs mcovingt@ai.uga.edu : \*\*\*\*\*  
:- The University of Georgia phone 706 542-0358 : \* \* \*  
:- Athens, Georgia 30602-7415 U.S.A. amateur radio N4TMI : \*\* \*\*\* \*\* <><

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End of Packet-Radio Digest V93 #169

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